

## **ABSTRACT**

A method for providing a QoS-guaranteeing multi-path and a method for providing disjoint paths using the same are provided. The method configures the shortest path tree by adapting the start node "s" and the destination node "d". When a new node is selected as a tree node in a tree configuration process according to the "s" or the "d", the closest node to either the "s" or the "d" is selected. If a specified node "v" is contained in both a tree oriented from the "s" and another tree oriented from the "d", one path of "s"--"v"--"d" is created. If all nodes are contained in either the tree of "s" or the other tree of "d", then a program of path creation process is terminated. Further, the method further includes a step for determining two disjoint paths from the "s" to the "d" among the found multiple paths above.